MASS HIGHWAY

November 17, 2003

RE: Revere, Malden, Saugus - Route 1 Relocation and Widening.

To Whom It May Concern:

I have enclosed for your review, as required by 301 CMR 11.03, an Environmental Notification Form for the subject project.

All comments should be sent to:

Ellen Roy Herzfelder, Secretary
Executive Office of Environmental Affairs
Attention: MEPA Office
251 Causeway Street – Suite 900
Boston, MA 02114-2150

Please send a copy of your comments to:

Massachusetts Highway Department
Environmental Division
10 Park Plaza, Room 4260
Boston, MA 02116-3973

Attn: Matthew F. DeSorbo

If you need any additional information regarding the subject project, please feel free to contact Matthew DeSorbo, at (617) 973-7882.

Sincerely,

Gregory H. Prendergast
Deputy Chief Engineer
Environmental Division

Commonwealth of Massachusetts
Executive Office of Environmental Affairs ■ MEPA Office

ENF Environmental Notification Form

For Office Use Only *Executive Office of Environmental Affairs*
EOEA No.:
MEPA Analyst:
Phone: 617-626-

The information requested on this form must be completed to begin MEPA Review in accordance with the provisions of the Massachusetts Environmental Policy Act, 301 CMR 11.00.

Project Name: Route 1 Relocation and Widening		
Street: Route 1 from Route 60 Rotary to Route 99		
Municipality: Revere, Malden, Saugus	Watershed: North Coastal	
Universal Tranverse Mercator Coordinates: Begin 333572E / 4698812N End 333572E /4702023N	Latitude: 42.4257°N to 42.4546°N Longitude: 71.0230°W to 71.0239°W	
Estimated commencement date: Spring 2007	Estimated completion date: Summer 2009	
Approximate cost: $ 54.0 million	Status of project design: 5% complete	
Proponent: MassHighway		
Street: 10 Park Plaza		
Municipality: Boston	State: MA	Zip Code: 02116
Name of Contact Person From Whom Copies of this ENF May Be Obtained: Kevin Walsh		
Firm/Agency: MassHighway	Street: 10 Park Plaza – Room 4260	
Municipality: Boston	State: MA	Zip Code: 02116
Phone: (617) 973-7529	Fax: (617) 973-8879	E-mail Kevin.Walsh@state.ma.us

Does this project meet or exceed a mandatory EIR threshold (see 301 CMR 11.03)?
☒Yes (301 CMR 11.03 (6)(a)1.b. ☐No

Has this project been filed with MEPA before?
☐Yes (EOEA No._____) ☒No

Has any project on this site been filed with MEPA before?
☐Yes (EOEA No._____) ☒No

Is this an Expanded ENF (see 301 CMR 11.05(7)) requesting:

a Single EIR? (see 301 CMR 11.06(8))	☐Yes	☒No
a Special Review Procedure? (see 301CMR 11.09)	☐Yes	☒No
a Waiver of mandatory EIR? (see 301 CMR 11.11)	☐Yes	☒No
a Phase I Waiver? (see 301 CMR 11.11)	☐Yes	☒No

Identify any financial assistance or land transfer from an agency of the Commonwealth, including the agency name and the amount of funding or land area (in acres):
MassHighway and FHWA construction funding

Are you requesting coordinated review with any other federal, state, regional, or local agency?
☒Yes(Specify FHWA – EA) ☐No

List Local or Federal Permits and Approvals:
Order of Conditions, Local Conservation Commission's; Environmental Assessment, FHWA; Section 401 Water Quality Certification; Massachusetts Department of Environmental Protection, Section 404 Programmatic General Permit, ACOE, Section 106 Review; Massachusetts Historical Commission

Which ENF or EIR review threshold(s) does the project meet or exceed (see 301 CMR 11.03):

- ☒ Land
- ☐ Water
- ☐ Energy
- ☒ ACEC
- ☐ Rare Species
- ☐ Wastewater
- ☐ Air
- ☐ Regulations
- ☒ Wetlands, Waterways, & Tidelands
- ☒ Transportation
- ☐ Solid & Hazardous Waste
- ☐ Historical & Archaeological Resources

Summary of Project Size & Environmental Impacts	Existing	Change	Total
LAND			
Total site acreage	80 Acres		
New acres of land altered		30 Acres	
Acres of impervious area	33 Acres	12 Acres	45 Acres
Square feet of new bordering vegetated wetlands alteration		Less than 5,000 sf	
Square feet of new other wetland alteration			
Acres of new non-water dependent use of tidelands or waterways			
STRUCTURES			
Gross square footage			
Number of housing units			
Maximum height (in feet)			
TRANSPORTATION			
Vehicle trips per day	Route 1 - 95,500	None	Route 1 - 95,500
Parking spaces			
WATER/WASTEWATER			
Gallons/day (GPD) of water use			
GPD water withdrawal			
GPD wastewater generation/ treatment			
Length of water/sewer mains (in miles)			

State Permits & Approvals

- ☒ Order of Conditions
- ☐ Superseding Order of Conditions
- ☐ Chapter 91 License
- ☒ 401 Water Quality Certification
- ☐ MHD or MDC Access Permit
- ☐ Water Management Act Permit
- ☐ New Source Approval
- ☐ DEP or MWRA Sewer Connection/ Extension Permit
- ☒ Other Permits (*including Legislative Approvals*) – Specify:

If required, WPA Variance

CONSERVATION LAND: Will the project involve the conversion of public parkland or other Article 97 public natural resources to any purpose not in accordance with Article 97?

☐ Yes (Specify_____) ☒ No

Will it involve the release of any conservation restriction, preservation restriction, agricultural preservation restriction, or watershed preservation restriction? ☐ Yes (Specify_____) ☒ No

RARE SPECIES: Does the project site include Estimated Habitat of Rare Species, Vernal Pools, Priority Sites of Rare Species, or Exemplary Natural Communities?

☐Yes (Specify 2002-2003 Boston North Quad) ☒No

HISTORICAL /ARCHAEOLOGICAL RESOURCES: Does the project site include any structure, site or district listed in the State Register of Historic Place or the inventory of Historic and Archaeological Assets of the Commonwealth?

☐Yes (Specify) ☒No

If yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources?

☐Yes (Specify) ☒No

AREAS OF CRITICAL ENVIRONMENTAL CONCERN: Is the project in or adjacent to an Area of Critical Environmental Concern?

☒Yes (Specify Rumney Marshes) ☐No

PROJECT DESCRIPTION: The project description should include **(a)** a description of the project site, **(b)** a description of both on-site and off-site alternatives and the impacts associated with each alternative, and **(c)** potential on-site and off-site mitigation measures for each alternative (*You may attach one additional page, if necessary.*)

The Massachusetts Highway Department (MassHighway) is proposing to widen and relocate a portion of Route 1 in Revere, Malden, and Saugus. The 2.4-mile project begins 1,500 feet south of the Route 1/Route 60 Interchange (Copeland Circle) and proceeds north through the Route 1/Route 99 Interchange (See Figures 1 and 9).

Route 1 within the project area is primarily a limited-access urban principal arterial highway that serves as the major north-south roadway for communities north of Boston. This portion of U. S. Route 1 has long-standing operational and safety problems that are the result of high traffic volumes, poor roadway geometry, and a reduction in travel lanes from six to four. Average daily traffic is approximately 95,000 vehicles per day.

Heavy traffic congestion occurs along Route 1, particularly north of Copeland Circle, because of high traffic volumes and a reduction in the number of travel lanes. North of Copeland Circle, Route 1 decreases from a six-lane highway (three lanes northbound and three lanes southbound) to a four-lane highway (two lanes northbound and two lanes southbound). Route 1 returns to a six-lane highway beyond the Route 1/Route 99 Interchange. The Level of Service (LOS) along Route 1 within the project limits is "D" during the morning peak period and "F" during the evening peak period.

Substandard roadway geometry at the exit and entrance ramps of the Route 1/Salem Street/Lynn Street Interchange contributes to the high number of accidents and congestion in this area. Roadway geometry deficiencies include an absence of acceleration and deceleration lanes, tight turning radii and the proximity of adjacent ramps. During the three-year period from 1997 to 1999, a total of 122 accidents occurred in this interchange area.

The deficiencies of Route 1 are described in *The Route 1 North Shore Transportation Improvement Study*, a planning study completed by the Central Transportation Planning Staff. The study recommends the reconstruction and widening of Route 1 along the existing roadway alignment between Copeland Circle and Route 99 and the reconstruction of the Route 1/Lynn Street/Salem Street Interchange. This alternative would provide some

improvement to the safety and efficiency of Route 1 in this area, however, as explained below, a more substantial improvement, particularly in the roadway's horizontal and vertical geometry, is required.

An additional northbound and southbound travel lane between Copeland Circle and Route 99 is critical to the improvement of safety and reduction of traffic congestion in this area. However, use of the existing alignment, with its steep grades and substandard horizontal curvatures, particularly in the former Rowes Quarry area, is unacceptable. The creation of a new highway alignment through the former Rowes Quarry area is proposed. This would allow for a safer highway alignment and a relocated Route 1/Salem Street Interchange. Alternatives studied are discussed in more detail in Attachment 1.

The following improvements to traffic operation and safety in this area are in the preferred alternative (See Figure 9):

- Construct an additional lane in each direction along Route 1 for the entire length (2.4 miles) of the project to provide a consistent six-lane facility;
- Relocate Route 1 eastward from Salem Street in Revere to approximately the Malden/Revere city boundary;
- Construct a new interchange along Route 1 approximately 1,000 feet north of the Route 1/Salem Street/Lynn Street Interchange;
- Close the existing Route 1/Salem Street/Lynn Street Interchange exit and entrance ramps;
- Construct ancillary roadways to provide continued access to local roadways from the new interchange at Route 1.

Under the preferred alternative, the project will require right-of-way takings to accommodate the new Route 1 alignment and the proposed interchange. Approximately 28.1 acres of land will be donated from the former Rowes Quarry property (owned by Roseland Property Company) and an additional 7.1 acres will be purchased from other residential and commercial property owners. The Roseland Property Company (Overlook Ridge DEIR filed June 30, 2002, EOEA # 11971) has agreed on the donation of land.

Based on the conceptual design, the project will affect less than 5,000 square feet of BVW and require approximately 8,300 cubic yards of fill within the 100-year floodplain. BVW and floodplain impacts would occur west of Route 1 directly north of the Pines River. A portion of the project is adjacent to the Rumney Marshes ACEC. MassHighway will work with the ACEC Program, and other environmental regulatory agencies, to avoid and/or minimize impacts land within the ACEC.

An ENF and mandatory EIR is required for this project pursuant to 301 CMR 11.03(1)(a) 2 and 11.03(6)(a) 1.b. The project involves the creation of greater than ten acres of impervious area and the widening of an existing roadway by one or more travel lanes for two or more miles.

LAND SECTION – all proponents must fill out this section

I. Thresholds / Permits

A. Does the project meet or exceed any review thresholds related to **land** (see 301 CMR 11.03(1)
_X_ Yes ___No; if yes, specify each threshold:
An ENF and mandatory EIR is required for this project pursuant to 301 CMR 11.03(1)(a) 2. The project involves the creation of greater than ten acres of impervious area.

II. Impacts and Permits

A. Describe, in acres, the current and proposed character of the project site, as follows:

	Existing	Change	Total
Footprint of buildings			
Roadways, parking, and other paved areas	33 acres	12 acres	45 acres
Other altered areas*	35 acres	-12 acres	23 acres
Undeveloped areas			

* Other altered areas to be affected include 28 acres of land within the former Rowes Quarry and 7 acres of private property to be acquired for the relocation of Route 1.

B. Has any part of the project site been in active agricultural use in the last three years?
___ Yes _X_ No; if yes, how many acres of land in agricultural use (with agricultural soils) will be converted to nonagricultural use?

C. Is any part of the project site currently or proposed to be in active forestry use?
___ Yes _X_ No; if yes, please describe current and proposed forestry activities and indicate whether any part of the site is the subject of a DEM-approved forest management plan:

D. Does any part of the project involve conversion of land held for natural resources purposes in accordance with Article 97 of the Amendments to the Constitution of the Commonwealth to any purpose not in accordance with Article 97?
___ Yes _X_ No; if yes, describe:

E. Is any part of the project site currently subject to a conservation restriction, preservation restriction, agricultural preservation restriction or watershed preservation restriction?
___Yes _X_ No; if yes, does the project involve the release or modification of such restriction?
___ Yes ___ No; if yes, describe:

F. Does the project require approval of a new urban redevelopment project or a fundamental change in an existing urban redevelopment project under M.G.L.c.121A?
___ Yes _X_ No; if yes, describe:

G. Does the project require approval of a new urban renewal plan or a major modification of an existing urban renewal plan under M.G.L.c.121B?
___ Yes _X_ No; if yes, describe:

H. Describe the project's stormwater impacts and, if applicable, measures that the project will take to comply with the standards found in DEP's Stormwater Management Policy:
The proposed project, when designed, will fully comply with DEP's Stormwater Management Policy.

I. Is the project site currently being regulated under M.G.L.c.21E or the Massachusetts Contingency Plan?
___ Yes _X_ No; if yes, what is the Release Tracking Number (RTN)?

J. If the project is site is within the Chicopee or Nashua watershed, is it within the Quabbin, Ware, or Wachusett subwatershed?
___ Yes __X__ No; if yes, is the project site subject to regulation under the Watershed Protection Act?
___ Yes ___ No

K. Describe the project's other impacts on land:

III. Consistency

A. Identify the current municipal comprehensive land use plan and the open space plan and describe the consistency of the project and its impacts with that plan(s):

The project is consistent with the current comprehensive land use plans of Revere, Malden and Saugus. The widening and realignment of Route 1 and the relocation of the Route 1/Lynn Street/Salem Street Interchange is consistent with land use plans in this region.

B. Identify the current Regional Policy Plan of the applicable Regional Planning Agency and describe the consistency of the project and its impacts with that plan:

The project is consistent with the Massachusetts Area Planning Council's *MetroPlan*. *MetroPlan* promotes a sustainable development pattern, focusing on existing infrastructure, to strengthen the region's economy and safeguard air, water, and land resources.

C. Will the project require any approvals under the local zoning by-law or ordinance (i.e. text or map amendment, special permit, or variance)? ___ Yes __X__ No; if yes, describe:

D. Will the project require local site plan or project impact review?
___ Yes __X__ No; if yes, describe:

RARE SPECIES SECTION

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **rare species or habitat** (see 301 CMR 11.03(2))? ___ Yes __X__ No; if yes, specify, in quantitative terms:

According to the 2002-2003 Massachusetts Natural Heritage Atlas Boston No. 1 Quadrangle, the project is not within an Estimated Habitat of Rare Wildlife.

B. Does the project require any state permits related to **rare species or habitat**? ___ Yes __X__ No

C. If you answered "No" to both questions A and B, proceed to the **Wetlands, Waterways, and Tidelands Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Rare Species section below.

II. Impacts and Permits

A. Does the project site fall within Priority or Estimated Habitat in the current Massachusetts Natural Heritage Atlas (attach relevant page)? ___Yes ___ No. If yes,

1. Which rare species are known to occur within the Priority or Estimated Habitat (contact: Environmental Review, Natural Heritage and Endangered Species Program, Route 135, Westborough, MA 01581, allowing 30 days for receipt of information):
2. Have you surveyed the site for rare species? ___ Yes ___No; if yes, please include the results of your survey.
3. If your project is within Estimated Habitat, have you filed a Notice of Intent or received an Order of Conditions for this project? ___ Yes ___No; if yes, did you send a copy of the Notice of Intent to the Natural Heritage and Endangered Species Program, in accordance with the Wetlands Protection Act regulations? ___ Yes ___ No

B. Will the project "take" an endangered, threatened, and/or species of special concern in accordance with M.G.L. c.131A (see also 321 CMR 10.04)? ___ Yes ___No; if yes, describe:

C. Will the project alter "significant habitat" as designated by the Massachusetts Division of Fisheries and Wildlife in accordance with M.G.L. c.131A (see also 321 CMR 10.30)? ___ Yes ___No; if yes, describe:

D. Describe the project's other impacts on rare species including indirect impacts (for example, stormwater runoff into a wetland known to contain rare species or lighting impacts on rare moth habitat):

WETLANDS, WATERWAYS, AND TIDELANDS SECTION

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **wetlands, waterways, and tidelands** (see 301 CMR 11.03(3))? ___ Yes __X__ No; if yes, specify, in quantitative terms:

B. Does the project require any state permits (or a local Order of Conditions) related to **wetlands, waterways, or tidelands**? __X__ Yes ___No; if yes, specify which permit:
The project will require an Order of Conditions from the applicable local Conservation Commissions.

C. If you answered "No" to both questions A and B, proceed to the **Water Supply Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Wetlands, Waterways, and Tidelands Section below.

II. Wetlands Impacts and Permits

A. Describe any wetland resource areas currently existing on the project site and indicate them on the site plan:
Wetlands adjacent to the Pines River, which passes underneath Route 1 immediately north of Copeland Circle, would be delineated during the preparation of the EIR.

B. Estimate the extent and type of impact that the project will have on wetland resources, and indicate whether the impacts are temporary or permanent:

Coastal Wetlands	Area (in square feet) or Length (in linear feet)
Land Under the Ocean	
Designated Port Areas	
Coastal Beaches	
Coastal Dunes	
Barrier Beaches	
Coastal Banks	
Rocky Intertidal Shores	
Salt Marshes	To Be Determined
Land Under Salt Ponds	
Land Containing Shellfish	
Fish Runs	
Land Subject to Coastal Storm Flowage	To Be Determined
Inland Wetlands	
Bank	
Bordering Vegetated Wetlands	Less than 5,000 square feet
Land under Water	
Isolated Land Subject to Flooding	
Bordering Land Subject to Flooding	6300 cy of fill?
Riverfront Area	

C. Is any part of the project
1. a limited project? ___ Yes __X__ No
2. the construction or alteration of a dam? ___ Yes __X__ No; if yes, describe:
3. fill or structure in a velocity zone or regulatory floodway? ___ Yes __X__ No
4. dredging or disposal of dredged material? ___ Yes __X__ No; if yes, describe the volume of dredged material and the proposed disposal site:
5. a discharge to Outstanding Resource Waters? ___ Yes __X__ No
6. subject to a wetlands restriction order? ___ Yes __X__ No; if yes, identify the area (in square feet):

D. Does the project require a new or amended Order of Conditions under the Wetlands Protection Act (M.G.L. c.131A)? _X_ Yes ___ No; if yes, has a Notice of Intent been filed or a local Order of Conditions issued? ___ Yes _X_ No; if yes, list the date and DEP file number:_____ Was the Order of Conditions appealed? ___ Yes ___ No. Will the project require a variance from the Wetlands regulations? ___ Yes ___ No.

E. Will the project:
   1. be subject to a local wetlands ordinance or bylaw? ___ Yes _X_ No
   2. alter any federally-protected wetlands not regulated under state or local law? ___ Yes _X_ No; if yes, what is the area (in s.f.)?

F. Describe the project's other impacts on wetlands (including new shading of wetland areas or removal of tree canopy from forested wetlands):

III. Waterways and Tidelands Impacts and Permits

A. Is any part of the project site waterways or tidelands (including filled former tidelands) that are subject to the Waterways Act, M.G.L.c.91? ___ Yes _X_ No; if yes, is there a current Chapter 91 license or permit affecting the project site? ___ Yes ___ No; if yes, list the date and number:

B. Does the project require a new or modified license under M.G.L.c.91? ___ Yes _X_ No; if yes, how many acres of the project site subject to M.G.L.c.91 will be for non-water dependent use?
   Current ___ Change ___ Total ___

C. Is any part of the project
   1. a roadway, bridge, or utility line to or on a barrier beach? ___ Yes _X_ No; if yes, describe:
   2. dredging or disposal of dredged material? ___ Yes _X_ No; if yes, volume of dredged material _____
   3. a solid fill, pile-supported, or bottom-anchored structure in flowed tidelands or other waterways? ___ Yes _X_ No; if yes, what is the base area? _____
   4. within a Designated Port Area? ___ Yes _X_ No

D. Describe the project's other impacts on waterways and tidelands:

IV. Consistency:

A. Is the project located within the Coastal Zone? ___ Yes _X_ No; if yes, describe the project's consistency with policies of the Office of Coastal Zone Management:

B. Is the project located within an area subject to a Municipal Harbor Plan? ___ Yes _X_ No; if yes, identify the Municipal Harbor Plan and describe the project's consistency with that plan:

WATER SUPPLY SECTION

I. **Thresholds / Permits**

A. Will the project meet or exceed any review thresholds related to **water supply** (see 301 CMR 11.03(4))? ___ Yes __X__ No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **water supply**? ___ Yes __X__ No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Wastewater Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Water Supply Section below.

II. **Impacts and Permits**

A. Describe, in gallons/day, the volume and source of water use for existing and proposed activities at the project site:

	Existing	Change	Total
Withdrawal from groundwater	_____	_____	_____
Withdrawal from surface water	_____	_____	_____
Interbasin transfer	_____	_____	_____
Municipal or regional water supply	_____	_____	_____

B. If the source is a municipal or regional supply, has the municipality or region indicated that there is adequate capacity in the system to accommodate the project? ___ Yes ___ No

C. If the project involves a new or expanded withdrawal from a groundwater or surface water source,
1. have you submitted a permit application? ___ Yes ___ No; if yes, attach the application
2. have you conducted a pump test? ___ Yes ___ No; if yes, attach the pump test report

D. What is the currently permitted withdrawal at the proposed water supply source (in gallons/day)? _____Will the project require an increase in that withdrawal?___ Yes ___ No

E. Does the project site currently contain a water supply well, a drinking water treatment facility, water main, or other water supply facility, or will the project involve construction of a new facility? ___ Yes ___ No. If yes, describe existing and proposed water supply facilities at the project site:

	Existing	Change	Total
Water supply well(s) (capacity, in gpd)	_____	_____	_____
Drinking water treatment plant (capacity, in gpd)	_____	_____	_____
Water mains (length, in miles)	_____	_____	_____

F. If the project involves any interbasin transfer of water, which basins are involved, what is the direction of the transfer, and is the interbasin transfer existing or proposed?

G. Does the project involve
1. new water service by a state agency to a municipality or water district? ___ Yes ___ No
2. a Watershed Protection Act variance? ___ Yes ___ No; if yes, how many acres of alteration?
3. a non-bridged stream crossing 1,000 or less feet upstream of a public surface drinking water supply for purpose of forest harvesting activities? ___ Yes ___ No

G. Describe the project's other impacts (including indirect impacts) on water resources, quality, facilities and services:

III. **Consistency** -- Describe the project's consistency with water conservation plans or other plans to enhance water resources, quality, facilities and services:

WASTEWATER SECTION

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **wastewater** (see 301 CMR 11.03(5))? ___ Yes __X__ No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **wastewater**? ___ Yes __X__ No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Transportation -- Traffic Generation Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Wastewater Section below.

II. Impacts and Permits

A. Describe, in gallons/day, the volume and disposal of wastewater generation for existing and proposed activities at the project site (calculate according to 310 CMR 15.00):

	Existing	Change	Total
Discharge to groundwater (Title 5)			
Discharge to groundwater (non-Title 5)			
Discharge to outstanding resource water			
Discharge to surface water			
Municipal or regional wastewater facility			
TOTAL			

B. Is there sufficient capacity in the in the existing collection system to accommodate the project? Yes____No____ .

C. Is there sufficient existing capacity at the proposed wastewater disposal facility?___ Yes ___ No; if no, describe how capacity will be increased:

D. Does the project site currently contain a wastewater treatment facility, sewer main, or other wastewater disposal facility, or will the project involve construction of a new facility? ___ Yes ___ No. If yes, describe as follows:

	Existing	Change	Total
Wastewater treatment plant (capacity, in gpd)			
Sewer mains (length, in miles)			
Title 5 systems (capacity, in gpd)			

E. If the project involves any interbasin transfer of wastewater, which basins are involved, what is the direction of the transfer, and is the interbasin transfer existing or proposed?

F. Does the project involve new sewer service by an Agency of the Commonwealth to a municipality or sewer district? ___ Yes ___ No

G. Is there any current or proposed facility at the project site for the storage, treatment, processing, combustion or disposal of sewage sludge, sludge ash, grit, screenings, or other sewage residual materials? ___ Yes ___ No; if yes, what is the capacity (in tons per day):

	Existing	Change	Total
Storage			
Treatment, processing			
Combustion			
Disposal			

H. Describe the project's other impacts (including indirect impacts) on wastewater generation and treatment facilities:

III. **Consistency** -- Describe measures that the proponent will take to comply with federal, state, regional, and local plans and policies related to wastewater management:

A. If the project requires a sewer extension permit, is that extension included in a comprehensive wastewater management plan? ___ Yes ___ No; if yes, indicate the EOEA number for the plan and describe the relationship of the project to the plan

TRANSPORTATION -- TRAFFIC GENERATION SECTION

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **traffic generation** (see 301 CMR 11.03(6))? ___ Yes __X__ No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **state-controlled roadways**? __ Yes __X__ No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Roadways and Other Transportation Facilities Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Traffic Generation Section below.

II. Traffic Impacts and Permits

A. Describe existing and proposed vehicular traffic generated by activities at the project site:

	Existing	Change	Total
Number of parking spaces	_____	_____	_____
Number of vehicle trips per day	_____	_____	_____
ITE Land Use Code(s):	_____	_____	_____

B. What is the estimated average daily traffic on roadways serving the site?

Roadway	Existing	Change	Total
_____	_____	_____	_____
_____	_____	_____	_____

C. Describe how the project will affect transit, pedestrian and bicycle transportation facilities and services:

III. **Consistency** -- Describe measures that the proponent will take to comply with municipal, regional, state, and federal plans and policies related to traffic, transit, pedestrian and bicycle transportation facilities and services:

ROADWAYS AND OTHER TRANSPORTATION FACILITIES SECTION

I. Thresholds

A. Will the project meet or exceed any review thresholds related to **roadways or other transportation facilities** (see 301 CMR 11.03(6))? _X_ Yes ___ No; if yes, specify, in quantitative terms:

The proposed project is subject to MEPA review pursuant to 310 CMR 11.03 (6)(a) 1.b. The project involves the widening of an existing roadway by one or more travel lanes for two or more miles.

B. Does the project require any state permits related to **roadways or other transportation facilities**? ___ Yes _X_ No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Energy Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Roadways Section below.

II. Transportation Facility Impacts

A. Describe existing and proposed transportation facilities at the project site:

	Existing	Change	Total
Length (in linear feet) of new or widened roadway			
Route 1	2.4 miles	0	2.4 miles
Width (in feet) of new or widened roadway			
Route 1	78 feet	32 feet	110 feet

Other transportation facilities:

B. Will the project involve any

1. Alteration of bank or terrain (in linear feet)? Approximately 100 linear feet
2. Cutting of living public shade trees (number)? None
3. Elimination of stone wall (in linear feet)? None

III. **Consistency** -- Describe the project's consistency with other federal, state, regional, and local plans and policies related to traffic, transit, pedestrian and bicycle transportation facilities and services, including consistency with the applicable regional transportation plan and the Transportation Improvements Plan (TIP), the State Bicycle Plan, and the State Pedestrian Plan:

Transportation issues facing the communities within the project area were examined in the *Lower North Shore Transportation Improvement Study,* a comprehensive multimodal planning study designed to identify and address existing and future transportation needs and issues related to transportation congestion, transit services and bicycle and pedestrian safety. Widening Route 1 to six lanes between Copeland Circle (Route 60) and Route 99 and reconstructing the Route 1/Salem Street/Lynn Street Interchange is specifically recommended by this study to reduce traffic congestion and improve safety.

The proposed project is listed in the 2000–2025 Boston Metropolitan Planning Organization's (MPO's) Transportation Plan. The project is consistent with the Boston MPO's goal of delivering a high level of transportation service within the region and improving air quality.

ENERGY SECTION

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **energy** (see 301 CMR 11.03(7))? ___ Yes _X_ No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **energy**? ___ Yes _X_ No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Air Quality Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Energy Section below.

II. Impacts and Permits

A. Describe existing and proposed energy generation and transmission facilities at the project site:

	Existing	Change	Total
Capacity of electric generating facility (megawatts)	_____	_____	_____
Length of fuel line (in miles)	_____	_____	_____
Length of transmission lines (in miles)	_____	_____	_____
Capacity of transmission lines (in kilovolts)	_____	_____	_____

B. If the project involves construction or expansion of an electric generating facility, what are
1. the facility's current and proposed fuel source(s)?
2. the facility's current and proposed cooling source(s)?

C. If the project involves construction of an electrical transmission line, will it be located on a new, unused, or abandoned right-of-way?___ Yes ___ No; if yes, please describe:

D. Describe the project's other impacts on energy facilities and services:

III. Consistency -- Describe the project's consistency with state, municipal, regional, and federal plans and policies for enhancing energy facilities and services:

AIR QUALITY SECTION

I. Thresholds

A. Will the project meet or exceed any review thresholds related to **air quality** (see 301 CMR 11.03(8))? ___ Yes _X_ No; if yes, specify, in quantitative terms:

D. Does the project require any state permits related to **air quality**? ___ Yes _X_ No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Solid and Hazardous Waste Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Air Quality Section below.

II. Impacts and Permits

A. Does the project involve construction or modification of a major stationary source (see 310 CMR 7.00, Appendix A)?___ Yes ___ No; if yes, describe existing and proposed emissions (in tons per day) of:

	Existing	Change	Total
Particulate matter			
Carbon monoxide			
Sulfur dioxide			
Volatile organic compounds			
Oxides of nitrogen			
Lead			
Any hazardous air pollutant			
Carbon dioxide			

B. Describe the project's other impacts on air resources and air quality, including noise impacts:

III. Consistency

A. Describe the project's consistency with the State Implementation Plan:

B. Describe measures that the proponent will take to comply with other federal, state, regional, and local plans and policies related to air resources and air quality:

SOLID AND HAZARDOUS WASTE SECTION

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **solid or hazardous waste** (see 301 CMR 11.03(9))? ___ Yes _X_ No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **solid and hazardous waste**? __ Yes _X_ No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Historical and Archaeological Resources Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Solid and Hazardous Waste Section below.

II. Impacts and Permits

A. Is there any current or proposed facility at the project site for the storage, treatment, processing, combustion or disposal of solid waste? ___ Yes ___ No; if yes, what is the volume (in tons per day) of the capacity:

	Existing	Change	Total
Storage			
Treatment, processing			
Combustion			
Disposal			

B. Is there any current or proposed facility at the project site for the storage, recycling, treatment or disposal of hazardous waste? ___ Yes ___ No; if yes, what is the volume (in tons or gallons per day) of the capacity:

	Existing	Change	Total
Storage			
Recycling			
Treatment			
Disposal			

C. If the project will generate solid waste (for example, during demolition or construction), describe alternatives considered for re-use, recycling, and disposal:

D. If the project involves demolition, do any buildings to be demolished contain asbestos?
___ Yes ___ No

E. Describe the project's other solid and hazardous waste impacts (including indirect impacts):

III. **Consistency**--Describe measures that the proponent will take to comply with the State Solid Waste Master Plan:

HISTORICAL AND ARCHAEOLOGICAL RESOURCES SECTION

I. Thresholds / Impacts

A. Is any part of the project site a historic structure, or a structure within a historic district, in either case listed in the State Register of Historic Places or the Inventory of Historic and Archaeological Assets of the Commonwealth? ___ Yes __X__ No; if yes, does the project involve the demolition of all or any exterior part of such historic structure? ___ Yes ___ No; if yes, please describe:

B. Is any part of the project site an archaeological site listed in the State Register of Historic Places or the Inventory of Historic and Archaeological Assets of the Commonwealth? ___ Yes __X__ No; if yes, does the project involve the destruction of all or any part of such archaeological site? ___ Yes ___ No; if yes, please describe:

C. If you answered "No" to all parts of both questions A and B, proceed to the **Attachments and Certifications** Sections. If you answered "Yes" to any part of either question A or question B, fill out the remainder of the Historical and Archaeological Resources Section below.

D. Have you consulted with the Massachusetts Historical Commission? ___ Yes __X__ No; if yes, attach correspondence

In compliance with state Chapter 254 and federal Section 106, MassHighway's Cultural Resource Section will coordinate its review with the State Historic Preservation Officer.

E. Describe and assess the project's other impacts, direct and indirect, on listed or inventoried historical and archaeological resources:

II. **Consistency** -- Describe measures that the proponent will take to comply with federal, state, regional, and local plans and policies related to preserving historical and archaeological resources:

ATTACHMENTS:

1. Plan, at an appropriate scale, of existing conditions of the project site and its immediate context, showing all known structures, roadways and parking lots, rail rights-of-way, wetlands and water bodies, wooded areas, farmland, steep slopes, public open spaces, and major utilities.
2. Plan of proposed conditions upon completion of project (if construction of the project is proposed to be phased, there should be a site plan showing conditions upon the completion of each phase).
3. **Original** U.S.G.S. map or good quality **color** copy (8-½ x 11 inches or larger) indicating the project location and boundaries
4. List of all agencies and persons to whom the proponent circulated the ENF, in accordance with 301 CMR 11.16(2).
5. Other: MEPA Granite Industrial Park History
   Quarry Place Traffic Impact and Access Study

CERTIFICATIONS:

1. The Public Notice of Environmental Review has been/will be published in the following newspapers in accordance with 301 CMR 11.15(1):

The Boston Globe	11/19/2003
(Name)	(Date)

2. This form has been circulated to Agencies and Persons in accordance with 301 CMR 11.16(2).

10/24/03 — Date

John Cogliano, Commissioner
Massachusetts Highway Department

10/24/03 — Date

Signature of Responsible Officer

10/24/03 — Date

Signature of person Preparing ENF

Kevin Walsh	Matthew Desorbo
MassHighway	MassHighway
Ten Park Plaza	Ten Park Plaza
Boston, MA 02116	Boston, MA 02116
617.973.7529	617.973. 7882

Attachment 1

Route 1 Corridor Improvements
Discussion of Alternatives

Several alternative designs have been developed for the Route 1 Corridor from Copeland Circle in Revere to Route 99 in Saugus. One of these alternative designs was developed for the *Lower North Shore Transportation Improvement Study,* a planning study completed by the Central Transportation Planning Staff (CTPS). MassHighway developed the other alternatives.

When evaluating proposed alternatives, their respective adherence to highway design safety standards, their affect on natural and cultural resources, such as wetlands and floodplains within, or adjacent to, the Rumney Marshes Area of Critical Environmental Concern (ACEC), and estimated project cost was examined. Also considered was each alternative's impact on existing and future residential and commercial property.

The following is a description of these alternatives.

Alternative No. 1: No-Build: This alternative is not considered acceptable because it would allow the existing operational and safety problems in the corridor to continue.

Alternative No. 2 - Reconfiguration of the Route 1/Lynn Street/Salem Street Interchange (Figure 2):
This alternative was recommended in the *Lower North Shore Transportation Improvement Study*. This alternative involves the widening of Route 1 from Copeland Circle in Revere to Route 99 in Saugus to accommodate the addition of one travel lane in each direction. The Route 1/Lynn Street/Salem Street Interchange would be reconstructed with all of the existing exit and entrance ramps either closed or substantially modified. The new exit and entrance ramps would have acceleration or deceleration lanes, better turning radii, and full movements at their intersections with Lynn and Salem Street, which would be signalized. Additionally, this alternative includes an improved connection between Route 1 northbound and Route 99, providing a right-lane merge from Route 99 to Route 1 northbound.

While this alternative would provide some degree of improvement in the operation of Route 1 in this area, it would not adequately address the existing safety problems caused by the roadway's geometric deficiencies. This alternative would not address the substandard vertical curves along the Route 1 mainline and the substandard geometry of the Route 1/Lynn Street/Salem Street Interchange. Additionally, wetland resources within the Rumney Marshes ACEC would be affected.

Alternatives No. 3 through 7 (Figures 3 through 7):

To address the geometric deficiencies of Alternative 2, MassHighway examined five roadway alignments for Route 1 between Copeland Circle and Route 99. These alignments ranged from reconstructing and widening the Route 1 on a "straight-line" alignment (Alternative 3) to reconstructing and widening Route 1 along increasingly more western alignments until reaching close to the existing Route 1 alignment (Alternative7).

Alternatives No. 3 through 7 all involve the closure of the existing Route 1/Lynn Street/Salem Street Interchange and the construction of a new diamond-shaped interchange approximately 1,000 feet to the north. Auxiliary roadways would also be constructed to maintain the existing connections to the local roadway network.

While Alternatives 3 through 7 all provided some improvement to the operation and safety of Route 1, none of these design alternatives struck the right balance between improved roadway geometry, impacts to cultural and natural resources, and impacts to existing and future residential and commercial property.

Alternative 8 - Widening Route 1 Along a "Modified Straight-Line" Alignment (Figure 8):

Alternative 8, a refinement of Alternative 5, was developed to reduce the wetland impacts associated with Alternative 5 while maintaining the improved roadway alignment. This alternative involves the reconstruction and widening of Route 1 from Copeland Circle in Revere to Route 99 in Saugus, including additional northbound and southbound travel lanes. A key feature of this alternative is the realignment of Route 1 approximately 1,200 feet to the east, within the former Rowes Quarry property. The existing Route 1/Lynn Street/Salem Street Interchange would be closed and a new diamond-shaped interchange would be constructed approximately 1,000 feet to the north. Several auxiliary roadways would also be constructed to maintain the existing connections to the local roadway network.

This alternative would still, however, impact existing and future residential and commercial developments.

Alternative 9 - Widening Route 1 Along a New Alignment (Figure 9):

Alternative p was developed to further reduce impacts to residential and commercial developments. This alternative also involves the reconstruction and widening of Route 1 from Copeland Circle in Revere to Route 99 in Saugus, including additional northbound and southbound travel lanes. This alternative would also involve a realignment of U.S Route 1 to the east, within the former Rowes Quarry property, improving the roadway geometry by lowering the vertical curve. Similarly, the existing Route 1/Lynn Street/Salem Street Interchange would be closed and a new diamond-shaped interchange would be constructed approximately 1,000 feet to the north and several auxiliary

roadways would also be constructed to maintain the existing connections to the local roadway network. The realignment of Route 1 in this alternative would follow a more westerly curve than the "modified straight-line" alignment of Alternative 8. The bridge reconstruction and roadway widening would likely affect wetland resources in the area of the Route 1 Bridge over the abandoned railway line.

Alternative 9 provides the best balance of improvements to Route 1 in this area by:

- Improving the existing roadway geometry by reducing the existing substandard horizontal and vertical curves;
- Adding a travel lane in each direction;
- Improving traffic safety and reducing congestion by closing the existing substandard Route 1/Lynn Street/Salem Street Interchange and constructing a new diamond-shaped interchange 1,000 to the north of the existing interchange;
- Minimizing wetland impacts, particularly at the Rumney Marshes ACEC; and
- Minimizing impacts to existing and future residential and commercial development

July 29, 2003

Route 1 Relocation and Widening Project
Revere, Malden, and Saugus, Massachusetts

Project Purpose
The purpose of the proposed project is to reduce congestion and improve capacity and safety in the Route 1 Corridor between Copeland Circle (Route 60) and Route 99 (approximately 2.4 miles long). The existing alignment of Route 1 in the project area has steep grades and substandard horizontal curvatures along Route 1 and at the exit and entrance ramps to the Salem Street/Lynn Street Interchange. In the project area Route 1 decreases from a six-lane highway (three lanes northbound and southbound) to a four-lane highway (two lanes northbound and two lanes southbound). This combination of substandard alignment, the lane drop, and high traffic volumes make this corridor severely congested during peak hours with an accident rate that is 25% higher than the statewide average for this type of facility.

Project Description
MassHighway proposes the following improvements in the project corridor:

- Construct an additional lane in each direction along Route 1 for the entire length (2.4 miles) to provide a consistent 6-lane facility;
- Relocate Route 1 Eastward from Salem Street in Revere to approximately the Malden/Revere city boundary;
- Construct a new interchange along Route 1 approximately 1,000 feet north of the Route 1 Salem Street/Lynn Street Interchange within the Rowe Quarry property;
- Close the existing Route 1/ Salem Street/Lynn Street Interchange;
- Construct ancillary roadways to provide continued access to local roadways from the new interchange at Route 1.

Under the preferred alternative, the project will require right-of-way takings to accommodate the new Route 1 alignment and the proposed interchange. The Rowe Quarry site (Overlook Ridge), which at full build-out includes over 2000 homes, cannot be fully redeveloped until the proposed Route 1 improvements are complete. As a result, Roseland Property Company (the owner of the quarry) has agreed to donate approximately 28.1 acres of land to be used for the new interchange. An additional 7.1 acres will be purchased from other residential and commercial property owners.

Project Consistency with Sustainable Development
The relocation and widening of Route 1 within the Cities of Revere, Malden and Saugus supports **sustainable development** by meeting the transportation needs of the present and future generations. The area is currently served by the MBTA by bus service which provides connections to the Malden Center, Oak Grove and Wellington Stations on the Orange line and commuter rail, and to the Wonderland Station on the Blue line. Public transportation in the project area will improve by bringing more vehicles, which currently use local roadways to bypass congestion, back onto Route 1.

While Route 1 in this area is a limited access highway and therefore not accessible to bicycles and pedestrians, improvements to Route 1 will result in level of service improvements to local streets and corridors, which will in-turn improve accommodations for bicyclists and pedestrians.

The Overlook Ridge Project proponents have also agreed as mitigation for traffic and air quality impacts to implement several TDM including a rideshare matching/carpool program for Overlook Ridge residents, to study and implement an area shuttle service to the Malden Center Station, to provide transit subsidies and install a secure bicycle storage area.

MASS HIGHWAY

Revere/ Malden / Saugus
U.S. Route 1 Widening and Relocation Project
Figure 1
Project Location Map

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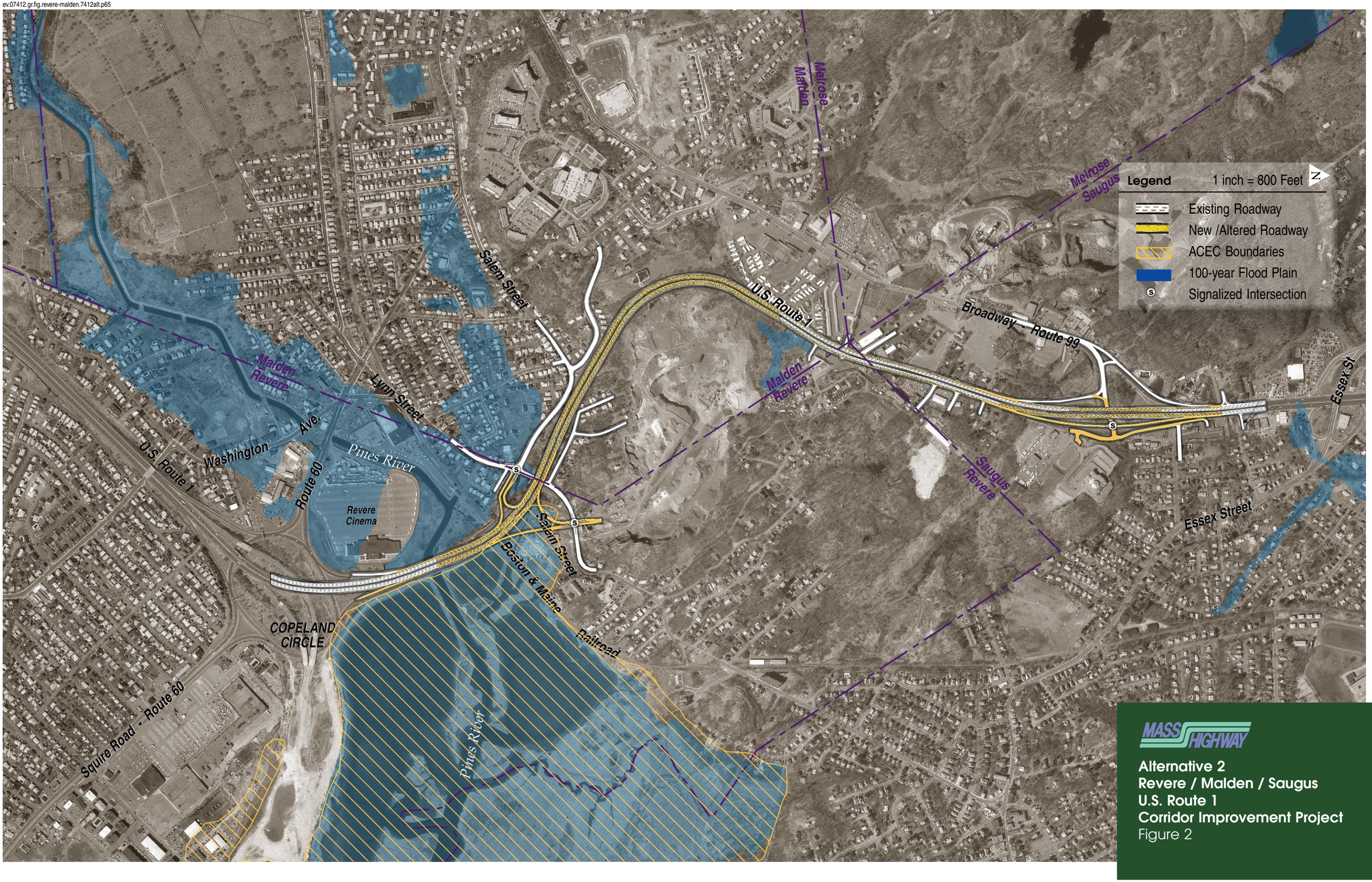
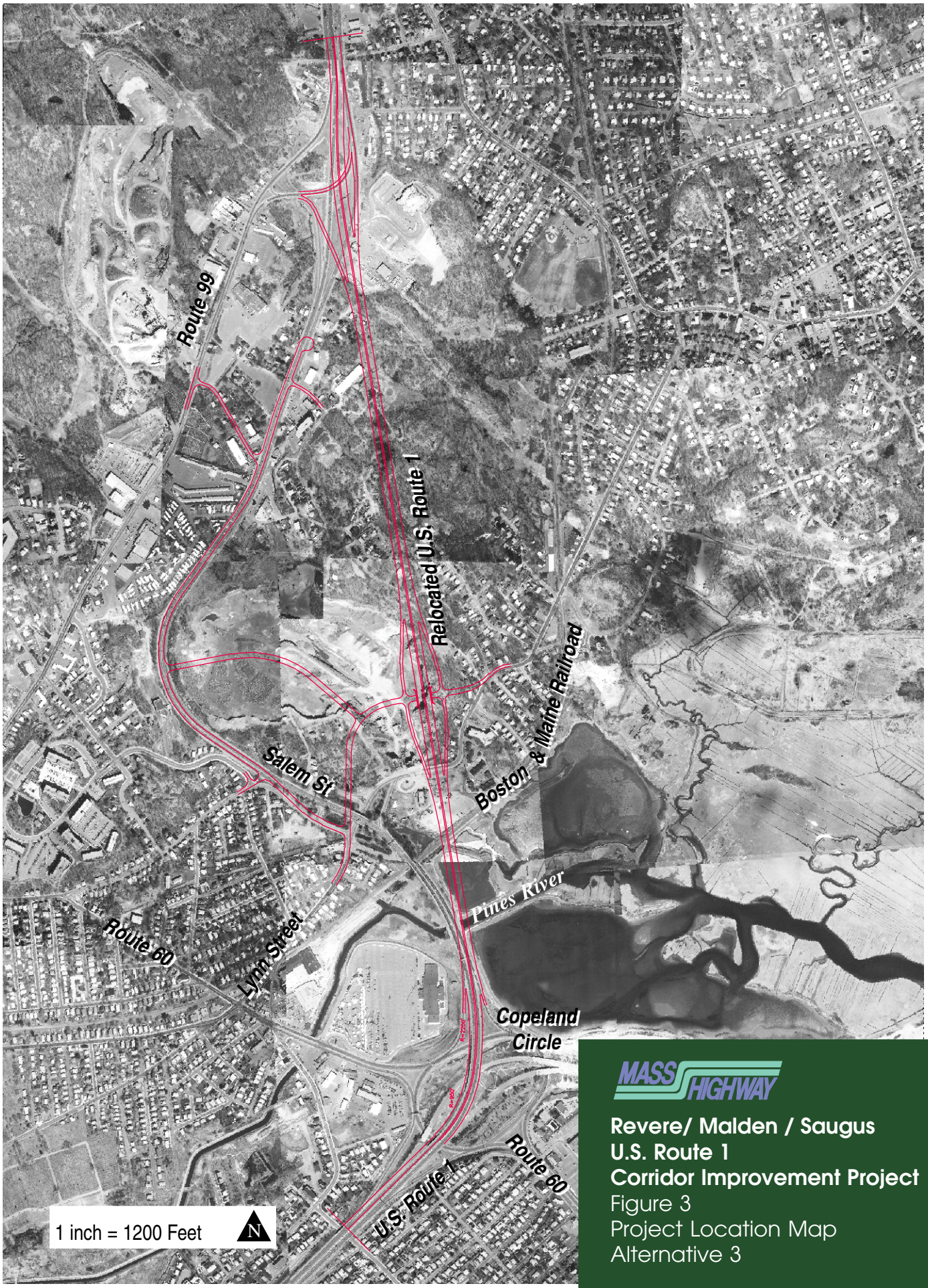


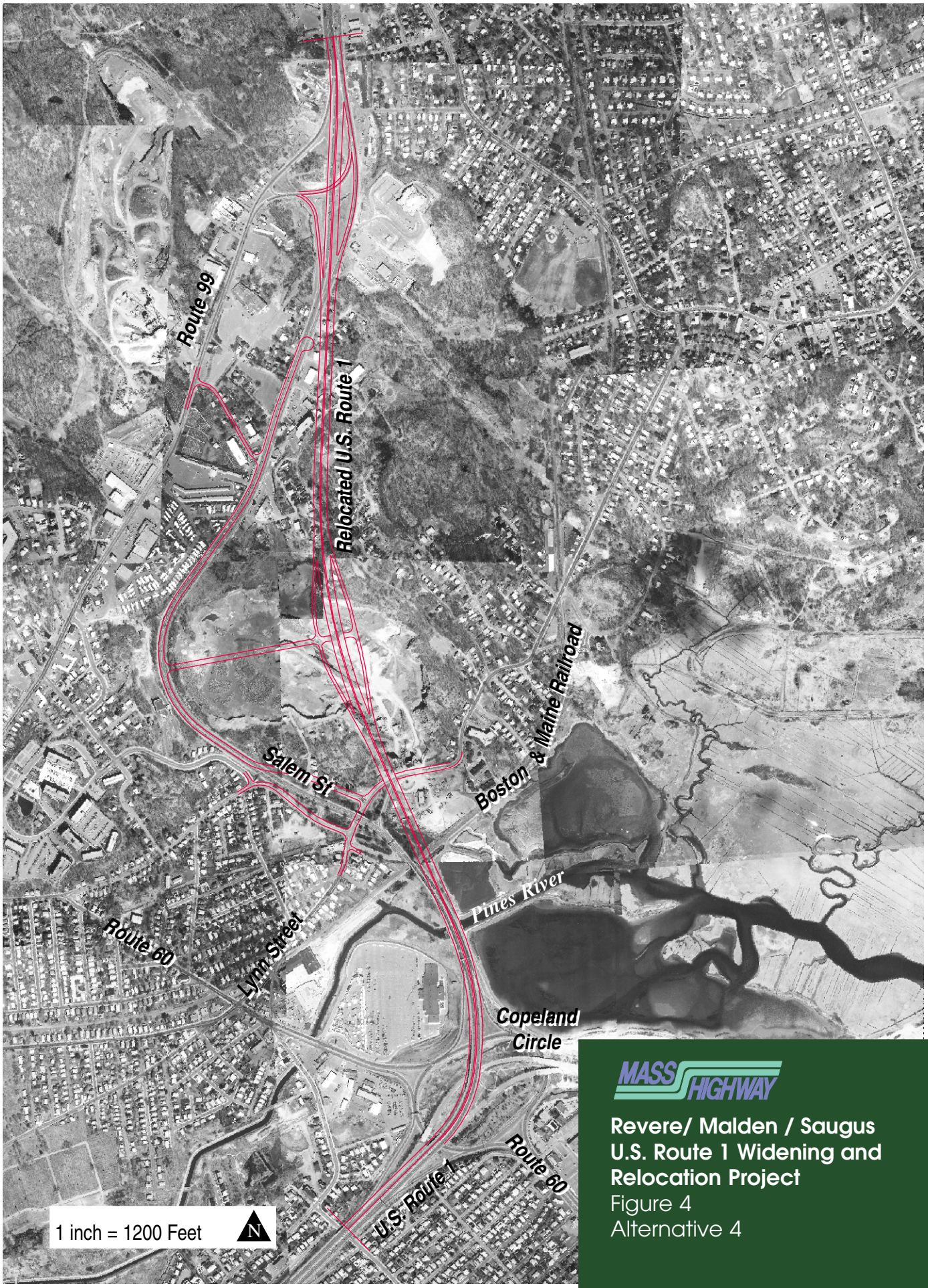
MASS HIGHWAY

Alternative 2
Revere / Malden / Saugus
U.S. Route 1
Corridor Improvement Project
Figure 2



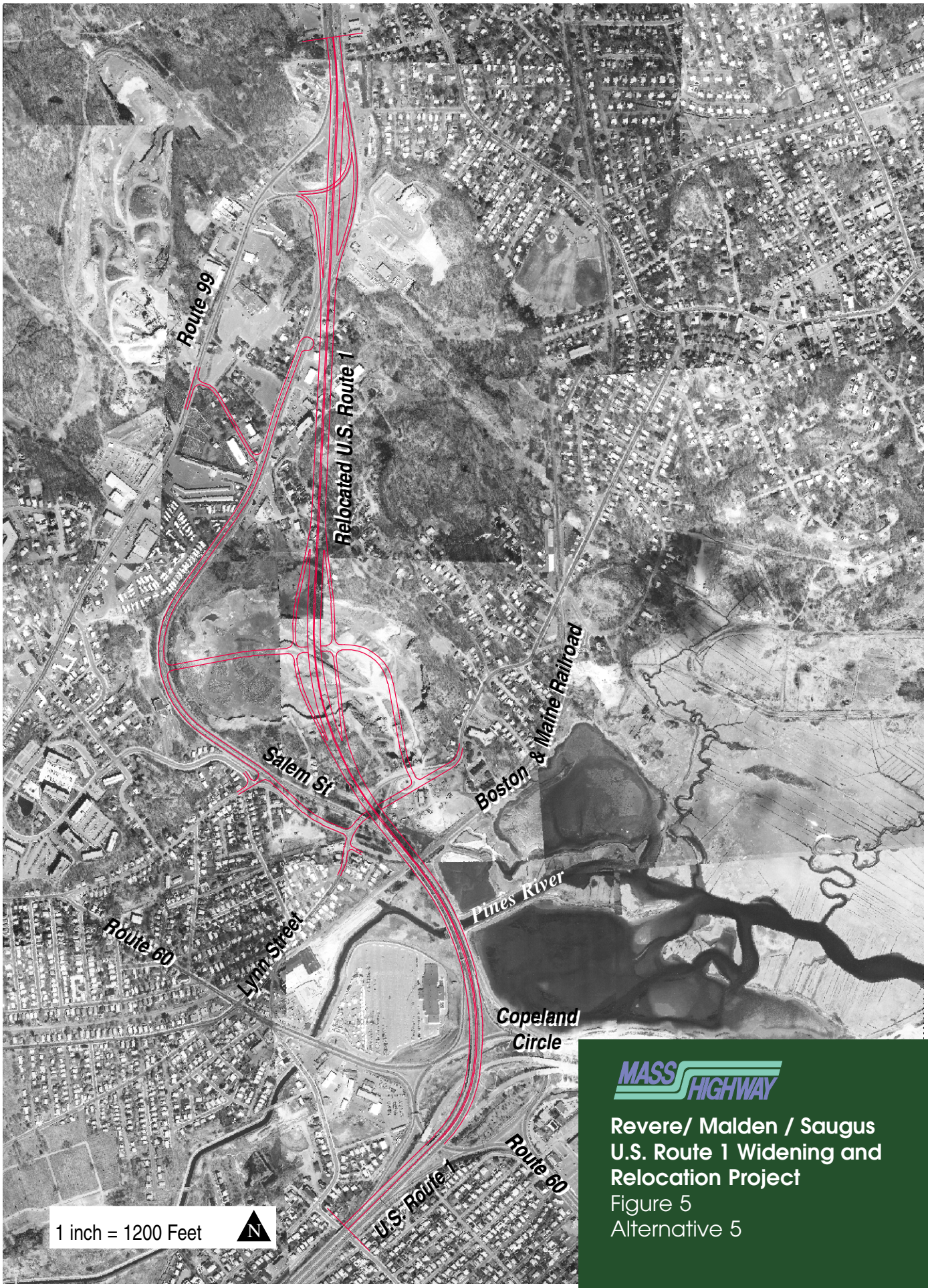
MASS HIGHWAY

Revere/ Malden / Saugus
U.S. Route 1
Corridor Improvement Project
Figure 3
Project Location Map
Alternative 3



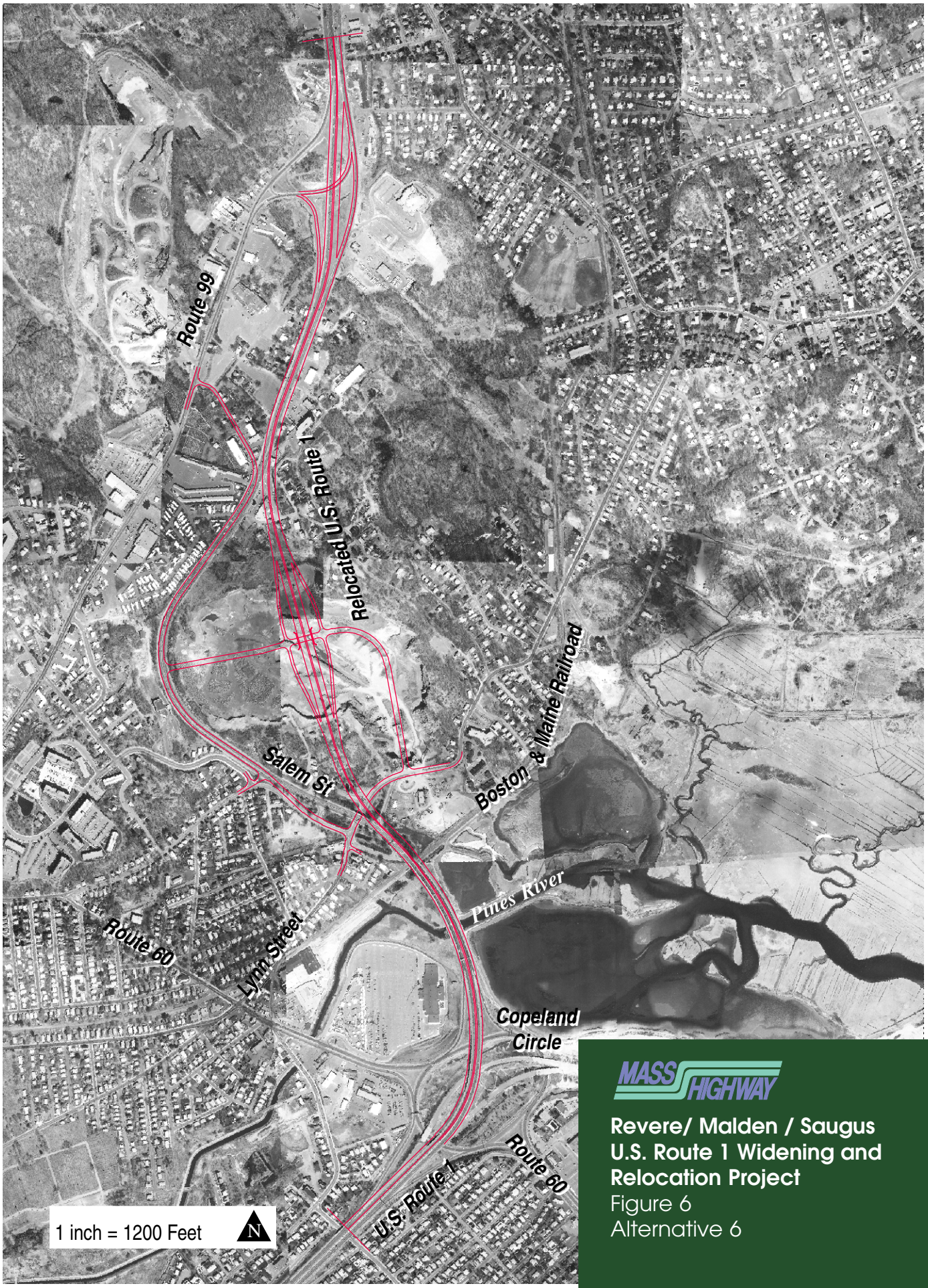
MASS HIGHWAY

Revere/ Malden / Saugus
U.S. Route 1 Widening and Relocation Project
Figure 4
Alternative 4



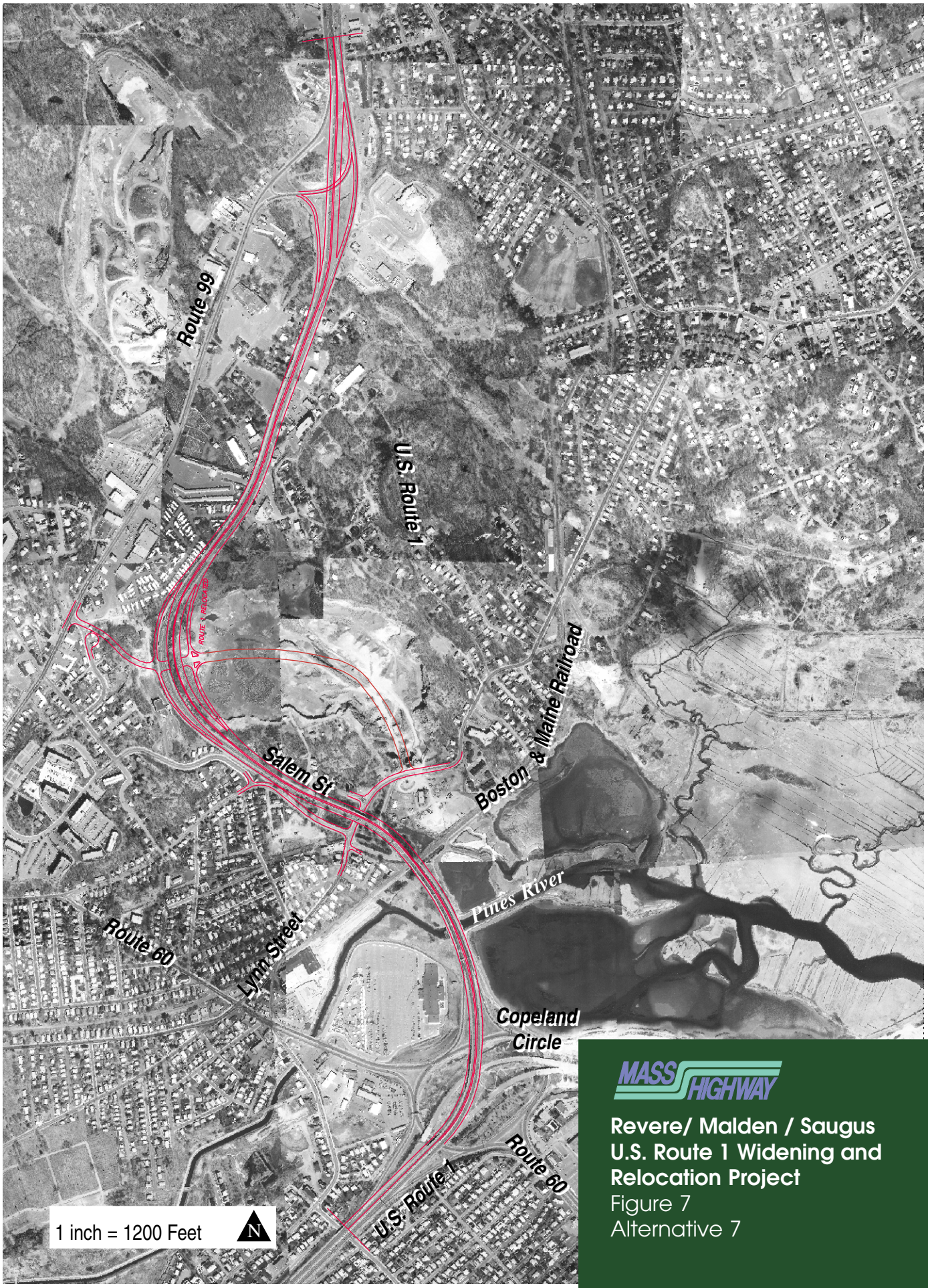
MASS HIGHWAY

Revere/ Malden / Saugus
U.S. Route 1 Widening and Relocation Project
Figure 5
Alternative 5



MASS HIGHWAY

Revere/ Malden / Saugus
U.S. Route 1 Widening and Relocation Project
Figure 6
Alternative 6



MASS HIGHWAY

Revere/ Malden / Saugus
U.S. Route 1 Widening and Relocation Project
Figure 7
Alternative 7

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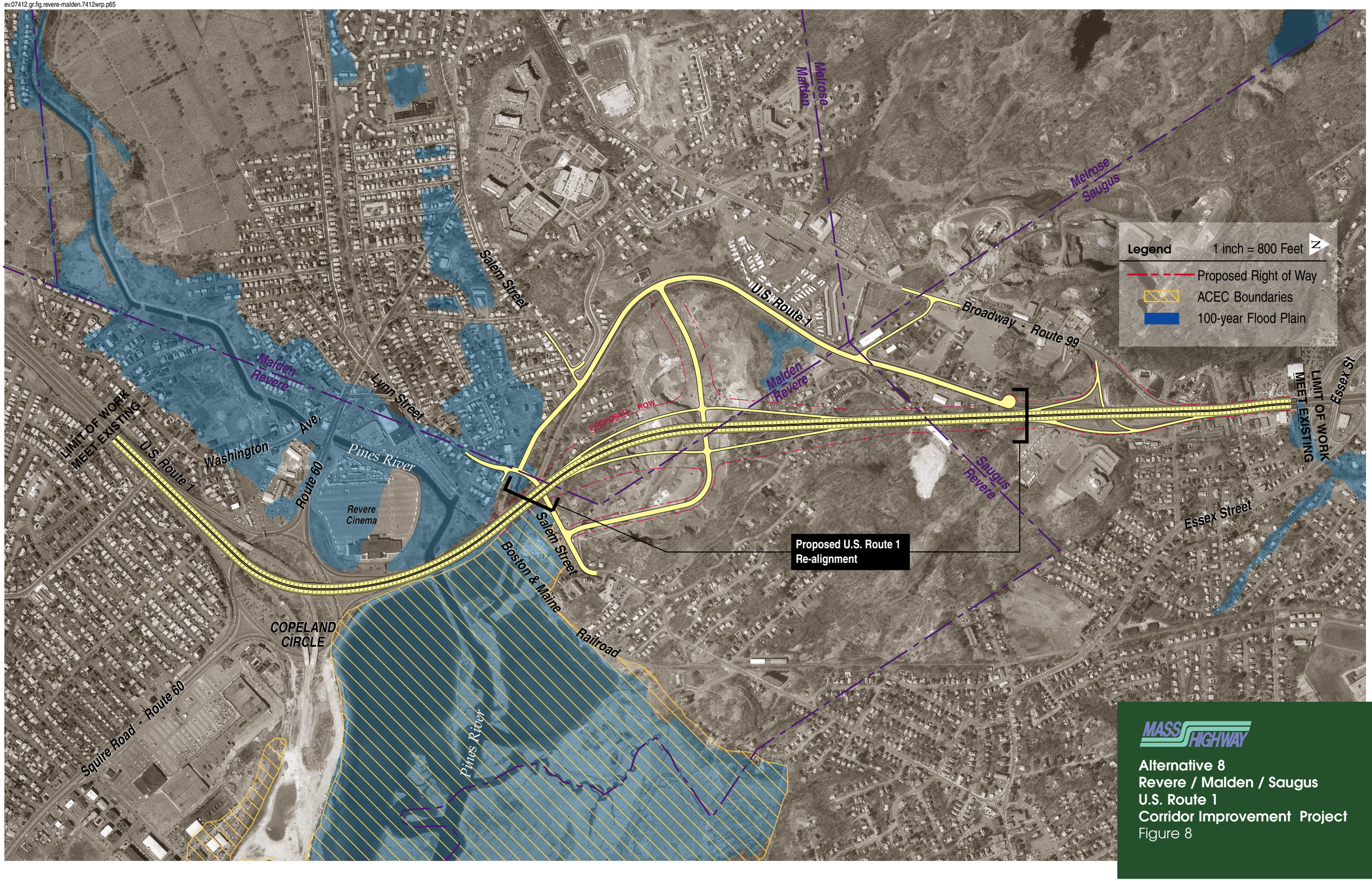

MASS HIGHWAY

Alternative 8
Revere / Malden / Saugus
U.S. Route 1
Corridor Improvement Project
Figure 8

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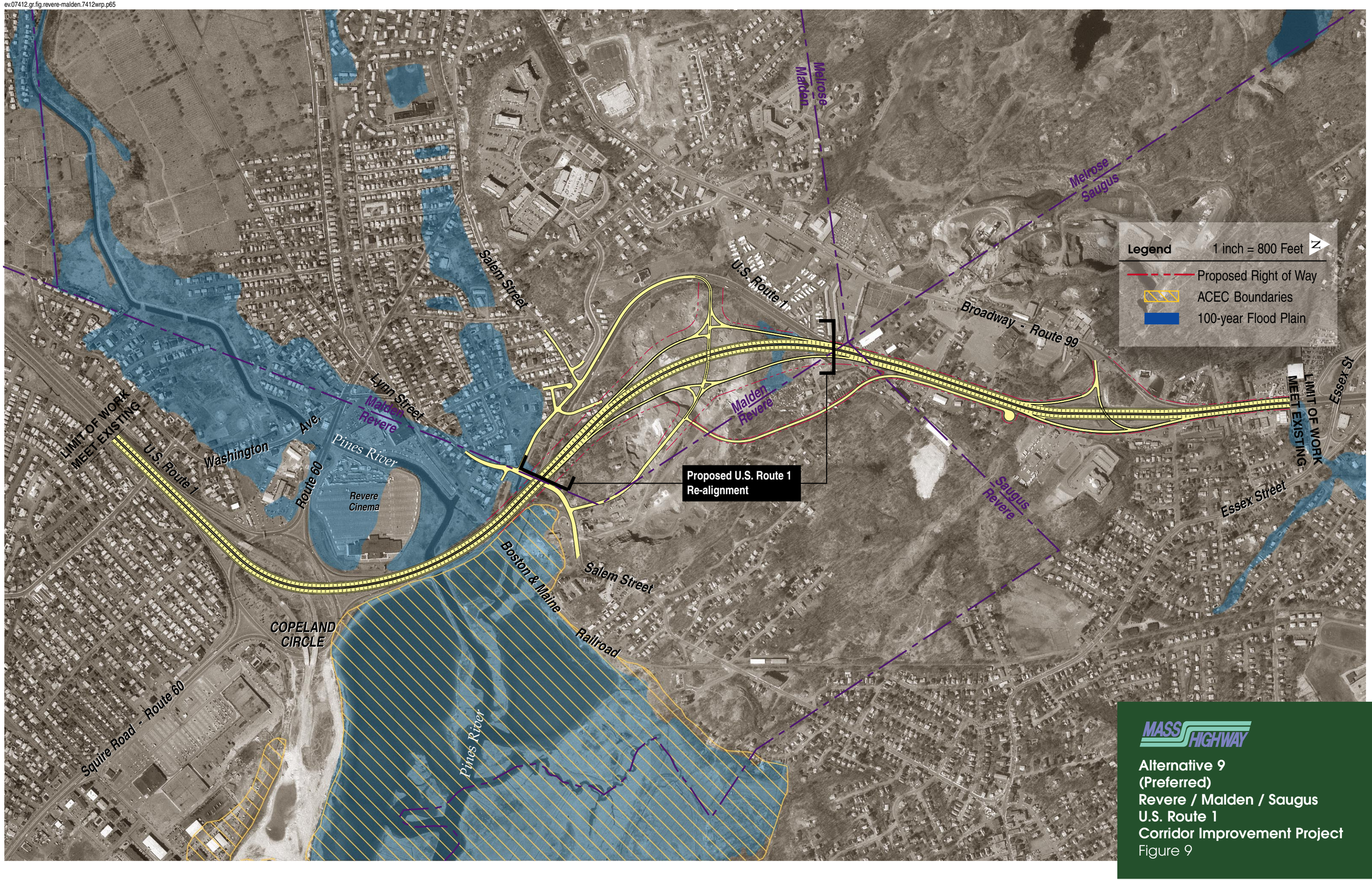

MASS HIGHWAY

Alternative 9
(Preferred)
Revere / Malden / Saugus
U.S. Route 1
Corridor Improvement Project
Figure 9